Please amend the claims as follows:

## Claims 1-11 (Cancelled)

12. **(Original)** A decontamination system for removing an oxide film containing radioactive nuclides and adhering to a contaminated object as a component of a radioactive material handling facility, said decontamination system comprising:

a decontaminating liquid circulating system provided with a first pump for circulating a decontaminating liquid through the contaminated object;

an ozone supply system for supplying ozone to the decontaminating liquid circulating in the decontaminating liquid circulating system;

a pH adjusting agent supply device for supplying a pH adjusting agent to the decontaminating liquid circulating in the decontaminating system;

an organic acid supplying device for supplying an organic acid as a reducing agent to the decontaminating liquid circulating in the decontaminating liquid circulating system;

an irradiating device for irradiating the decontaminating liquid circulating in the decontaminating liquid circulating system with light; and

an ion-exchange device for removing ions contained in the decontaminating liquid circulating in the decontaminating liquid circulating system.

13. **(Currently amended)** The decontamination system according to claim 12, further comprising:

a bypass line connected to a line included in the first circulating system; and a second pump disposed in the bypass line to circulate the decontaminating liquid through the bypass line and the contaminated object.

14. **(Original)** The decontamination system according to claim 12, wherein the circulating system is provided with a buffer tank,

wherein the ozone supply system comprises an ozonizer, a circulation line connected to the buffer tank, and mixing pump for mixing ozone generated by the ozonizer in the decontaminating liquid in the circulating line,

and wherein the pH adjusting agent supply device and the organic acid supply device are disposed so as to supply the pH adjusting agent and the organic acid, respectively, into the buffer tank.

- 15. **(Original)** The decontamination system according to claim 14, wherein the contaminated object is a member capable of being removed from the radioactive material handling facility, and the buffer tank is capable of receiving the contaminated object for immersion in the decontaminating liquid contained therein.
- 16. **(Currently amended)** The decontamination system according to claim 14, further comprising an ozone exhaust system including an ozone processing device connected to the buffer tank.
- 17. **(Original)** The decontamination system according to claim 16, wherein the ozone processing device is provided with activated charcoal or a metal oxide is used for decomposing ozone into oxygen.
- 18. **(Currently amended)** The decontamination system according to claim 17, wherein the ozonizer is an electrolyzing device having an anode chamber formed on one side of a solid electrolyte and a cathode chamber formed on the other side of the solid electrolyte, and capable of generating ozone in the anode chamber by a solid electrolyte electrolysis process which decomposes pure water by electrolysis using an anode of a catalytic metal disposed in the anode chamber[[.]];

said system further comprising a catalytic combination device connected to the ozone processing device and the cathode chamber of the ozonizer to produce water from oxygen produced by decomposing ozone by the ozone decomposing device and hydrogen produced in the cathode chamber.

19. **(Original)** The decontamination system according to claim 16, wherein the ozone supply device is connected to the buffer tank by a line to return ozone gas escaped from an ozone solution contained in the buffer tank to the ozone supply device.

Claim 20 (Cancelled)